

10/549562

1/12/85
JC20 R330 PCT/PTO 19 SEP 2005

BOXER SHORT-BOXER BRIEF TYPE ARTICLE OF LINGERIE

This invention relates to a boxer short-type article of lingerie for the lower body, which is intended especially for men but which may be used in the manufacture of articles for women or children.

5 Various articles of underclothing are currently known on the market for clothing the lower part of a man's body : briefs, G-strings, boxer briefs, boxer shorts. The invention relates more particularly to the boxer brief and the boxer short.

10 The boxer brief is an article worn close to the body from the waist to mid-thigh ; its advantage is that it fits closely to the form of the lower part of the trunk and thighs. The boxer short clothes the same parts of the body, but is worn far from the body and
15 even loose-fitting. These two articles are very well-liked but they have advantages and disadvantages when worn, especially under clothing, e.g., a pair of trousers. The advantage of the boxer brief is that it is an article worn very close to the body, even
20 clinging, but this may cause discomfort with respect to the lower part of the trunk and the male genitals : lack of freedom, too much compression. The boxer short is worn far from the body, therefore without any

compression, and is generally very comfortable when no outerwear is worn, during moments of relaxation. Its weakness becomes obvious when it is worn under a pair of trousers : the loose-fitting legs run down over the
5 thighs positioning themselves poorly in relation to the trouser legs. This leads to serious nuisances such as pinching of the genitals, riding up of the legs, and folds under the trousers which are visible from the outside and therefore unattractive.

10 The purpose of the invention is to eliminate this discomfort noted when wearing the boxer short.

Thanks to the invention, this purpose is achieved by a boxer short-type article of lingerie comprising a trunk part and leg parts, the trunk part being made of
15 a loose-fitting textile, characterized in that the leg parts are made of a form-fitting textile, i.e., in order to be in constant contact with the thighs, as in the case of a boxer brief and unlike a conventional boxer short.

20 In other words, the new article consists of a boxer short-boxer brief in which the lower body part comes from the boxer short and the part running down over the thighs comes from the boxer brief. The boxer short of the invention is advantageously made by
25 knitting, and preferably by tubular knitting.

The textile material can consist of the same textile material for the two parts, and differ only by the form-fitting or loose-fitting grade in relation to the normal size of the article. However, the leg part
30 is preferably made with the same stitch as the trunk part but with the introduction of a spandex yarn. The spandex thus gives the leg part the desired form-fitting quality, while the trunk part can remain loose-fitting.

The limit between the trunk part and the leg part advantageously consists of a substantially horizontal line passing through the upper part of the inseam or crotch.

5 The invention also concerns a method of manufacturing an article of the above-mentioned type, characterized in that one knits the article on a circular loom, by beginning with a bottom welt and finishing by a waistband, and one knits the leg part
10 which goes beyond the welt with a yarn having an elasticity higher to that of the yarn used for knitting then the trunk part.

Advantageously, the yarn presents an elasticity obtained through plating a non-elastic yarn with an
15 elastic yarn. In this way, one can keep the same knitting method for the leg part and the trunk part, the same stitches and the same yarns, only differing by the introduction of an elastic plated yarn in the yarn used for the leg part.

20 Other advantages and characteristics of the invention will become obvious upon reading the description made with reference to the appended drawings in which :

Figure 1 shows a front view of one example of an
25 article according to the invention, in this case a man's boxer short-boxer brief,

Figures 2 and 3 show diagrams of stitches used within the context of the invention.

Figure 1 shows a boxer short-boxer brief according
30 to the invention made from a DIM "Absolu nu" 6277 boxer brief for men, knitted on a Santoni SM8 circular knitting machine. However, by assembling fabrics similar to those of the invention, the article can be obtained using the cut and sewn technique currently
35 used primarily to produce underwear. This article is

knitted by starting with the lower facing or welt 4 and finishing with the waistband 1. The welt 4, of advantageously 1 cm to 2 cm, forms a double layer of knit, with mutual fastening through any known technique
 5 (for example through the dial plate). The article includes a so-called trunk part 2 designed to cover the lower part of the body and two leg parts 3 designed to cover the top part of the thighs, of advantageously 5 to 8 cm (including the welt 4).

10 The leg part 3, which comes into contact with the thighs, is knitted without any modification in comparison with that of a boxer brief of the corresponding size. The stitch used for this part 3 is illustrated schematically in figure 2. A polyamide 66
 15 fiber assembled in two ply of 78 dtex and 68 strands, plated with a Linel[®] fiber (elastomeric fiber) of 22 dtex, is knitted on the 8 feeds of the 28-gauge Santoni SM8 15" (approximately 38 cm) knitting machine. For the polyamide fiber, the settings adopted for a commercial
 20 size 4 consist of a tension of 5 grams and an absorbed yarn length of 4.40 meters/revolution ; for the Linel[®] fiber coming from the Elan feeder regulator at a speed of 915 revolutions/minute.

The objective is to preserve a certain holding
 25 capacity of the fabric so that it makes good contact with the thighs. For this reason, a different construction can be used, but the use of a spandex fabric facilitates attainment of the objective. Preferably, the knit elasticity, responsible for the
 30 holding capacity, present in the leg part zone, is at least 20 %, or preferably 50 % higher than that present in the trunk part.

The trunk part 2, which must be loose-fitting over the lower part of the body, is knitted like the leg
 35 part 3, but without the use of spandex, as shown in the

stitch diagram of figure 3. Thus, the part 2 becomes similar to the boxer short with a similar fit.

This part 2 can be knitted from other materials for different degrees of comfort and esthetic appearance. However, preferably, there is no change in materials nor knitting between the two parts, except for the bringing in of a plated elastic yarn in the leg part. In this invention, to offer maximum comfort and in order to prevent the possible changes in yarns from being visible, the transition from area 3 to area 2 has been situated on the line 6 passing through the upper part of the inseam, level with the end of the body panel 5 used for installing the gusset assembled during the manufacturing operation and carried out in the same way as is customary for a boxer brief of this type.

The separate lining of the boxer brief, as concerns the material of part 3, is preserved in order to maintain the shape of the boxer brief on the thighs and its comfort when being worn.